



# UNITED STATES PATENT AND TRADEMARK OFFICE

*MN*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,833	12/26/2001	Yuemean Chen	P-9366.00	9335
27581	7590	05/02/2007		
MEDTRONIC, INC. 710 MEDTRONIC PARK MINNEAPOLIS, MN 55432-9924			EXAMINER PITARO, RYAN F	
			ART UNIT	PAPER NUMBER
			2174	
			MAIL DATE	DELIVERY MODE
			05/02/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/033,833

Applicant(s)

CHEN ET AL.

Examiner

Ryan F. Pitaro

Art Unit

2174

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. This communication is responsive to Amendment filed 2/6/2007.
2. Claim 13 has been added as new. Claims 1-13 are pending in this application.

This action is Final.

3.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olson et al ("Olson", US# 6,366,809) in view of Anderson ("Anderson", US#6,078,871) in further view of Obel et al ("Obel", US 6,748,273) in view of Lesinski et al ("Lesinski", US 5,881,158).

As per independent claim 1, Olson discloses a software system in cooperation with a medical device microprocessor and circuitry to provide dynamic, real time display of capacitor charge/discharge performance and energy status, the software system comprising: a graphical user interface (Column 7 lines 33-35) indicating a plurality of status parameters (Column 7 lines 39-47); means for initiating access to said plurality of

Art Unit: 2174

status parameters (Figure 6B item 90); and means for manifesting said dynamic, real time display of the status (Figure 5 item 60). However, Olson does not explicitly show a true graphical user interface, but Anderson teaches a graphical user interface (Figure 3). Therefore it would have been obvious to an artisan at the time of the invention to combine Olson's system with the current teaching of Anderson. Motivation to do so would have been to provide a more detailed way of reporting the battery charge status. Olson-Anderson fails to distinctly point out the medical device being an implantable cardioverter-defibrillator. However, Obel teaches at least one capacitor operatively coupled to an implantable cardioverter-defibrillator (Abstract lines 1-5) and Lesinski provides support that a battery is equivocal to a capacitor as a recharging energy storage device in implantable devices as taught by Lesinski (Column 8 lines 44-53). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Olson-Anderson and the teaching of Obel. Motivation to do so would have been to provide an implantable medical device, which can be monitored without a docking station regardless of energy source.

As per claim 2, which is dependent on claim 1, the modified Olson discloses a software system including a status bar indicative of current condition of at least one of said plurality of status parameters, and wherein an interior portion of said status bar progressively fills in as a given status parameter proceeds toward a predetermined completion status (Anderson, Figure 3 item 127).

As per claim 3, which is dependent on claim 1, while the modified Olson fails to expressly point out a cancel-operation button operatively couple to said means for

Art Unit: 2174

initiating access, Anderson does teach a software program, which shows battery status, executed by the CPU (Column 6 lines 34-37). Furthermore, Official Notice is taken that means for canceling ongoing programs are well known in the art. In most software environments, after a program has been executed the software gives means to terminate the program. This often comes in the form of an X button in the upper right hand corner, or a close button through a drop down menu. Therefore it would have been obvious to an artisan at the time of the invention to combine such a feature with the system of the modified Olson.

As per claim 6, which is dependent on claim 4, modified Olson fails to distinctly point out voltage/energy levels. However, Anderson teaches a system including a charging status display of temporal voltage/energy level during a capacitor charging sequence (Column 5 lines 19-20). Therefore it would have been obvious to an artisan at the time of the invention to combine Olson's system with the current teaching of Anderson. Motivation to do so would have been to provide a more accurate assessment of the time needed to charge the system.

3. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olson et al ("Olson", US# 6,366,809) in view of Obel et al ("Obel", US 6,748,273) in view of Lesinski et al ("Lesinski", US 5,881,158).

As per independent claim 4, the Olson discloses a software system implemented in conjunction with a microprocessor circuitry of an implantable medical device, the

software system comprising: means for displaying a plurality of capacitor status parameters (Olson, Figure 5 item 60); means for tracking voltage/energy level at anytime during charging of said at least one capacitor (Olson, Column 5 lines 37-39), means for canceling one of a display couple to the means for tracking and a capacitor charging sequence at anytime during said charging of said at least one capacitor (Figure 6B item 90). However, Olson does not distinctly point out a medical device being an implantable medical device. However, Obel teaches for at least one capacitor operatively coupled to an implantable cardioverter-defibrillator (Obel, Abstract lines 1-5) and Lesinski provides support that a battery is equivocal to a capacitor as a recharging energy storage device in implantable devices as taught by Lesinski (Column 8 lines 44-53). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Olson and the teaching of Obel. Motivation to do so would have been to provide an implantable medical device, which can be monitored without a docking station regardless of energy source.

As per claim 7, which is dependent on claim 4, Olson-Obel-Lesinski discloses a software system wherein a capacitor charging status of a start, charging and complete condition are displayed based on the respective charging status of the capacitor (Figure 5 items 62 & 64).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olson et al ("Olson", US# 6,366,809) and Obel et al ("Obel" US 6,748,273) and Lesinski et al ("Lesinski", US 5,881,158) in view of Kaib et al ("Kaib", US# 5,929,601).

As per claim 5, which is dependent on claim 4, Olson-Obel-Lesinski fails to distinctly point out a normal or slow charging mode. However, Kaib teaches a system including a charging-rate circuit operation, wherein said charging-rate circuitry is selectably operable in one of a normal mode and a slow mode (Column 5 lines 53-55). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Olson-Obel-Lesinski with the teaching of Kaib. Motivation to do so would have been to provide the user the option to minimize charge when time is a factor.

5. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson ("Anderson", US#6,078,871) in view of Kaib et al ("Kaib", US# 5,929,601) in further view of Obel et al ("Obel", US# 6,748,273) in view of Lesinski et al ("Lesinski", US 5,881,158).

As per independent claim 8, Anderson discloses a capacitor charging display, displayable on a screen, the display comprising: means for displaying a capacitor charging status (Figure 3); means for displaying a starting voltage/energy (Column 5 lines 19-20); means for displaying a target voltage/energy (Column 5 lines 19-20); means for displaying one of an elapsed time capacitor charging time and a capacitor

charging rate (Figure 2); means for canceling a charging operations (*unplug PC*); means for displaying a charging progress metric based on voltage/energy of at least one capacitor (Column 5 lines 19-20). Olson fails to distinctly point out charging circuit conditions. However, Kaib teaches charging circuit condition (Column 5 lines 53-55). Therefore it would have been obvious to an artisan at the time of the invention to combine the display of Anderson with the teaching of Kaib. Motivation to do so would have been to provide the user the option to minimize charge when time is a factor. Anderson-Kaib fails to distinctly point out the medical device being an implantable cardioverter-defibrillator. However, Obel teaches at least one capacitor operatively coupled to an implantable cardioverter-defibrillator (Abstract lines 1-5) and Lesinski provides support that a battery is equivocal to a capacitor as a recharging energy storage device in implantable devices as taught by Lesinski (Column 8 lines 44-53). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Anderson-Kaib and the teaching of Obel. Motivation to do so would have been to provide a battery monitoring method and circuit which allow a new way of obtaining reliable information about remaining operation time of the battery of an implantable heart stimulator all the time from the early depletion phase of the battery.

As per claim 10, which is dependent on claim 8, the modified Anderson discloses a display wherein the screen is a PC screen (Anderson, Figure 1 item 115).



Application/Control Number: 10/033,833  
Art Unit: 2174

Page 8

6. Claims 9,11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson ("Anderson", US#6,078,871) and Kaib et al ("Kaib", US# 5,929,601) and Obel et al ("Obel", US# 6,748,273) and Lesinski et al ("Lesinski", US 5,881,158) in further view of Rockwell et al ("Rockwell", US# 6,597,948)

As per claim 9, which is dependent on claim 8, the modified Anderson fails to specifically point out a programmer screen. However, Rockwell teaches a programmer screen (Figure 7 item 22). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified display of Anderson with the teaching of Rockwell. Motivation to do so would have been to provide a way of inputting data on the device.

As per claim 11, which is dependent on claim 9, the modified Anderson fails to distinctly point out a PC screen and programmer screen remotely located. However, Rockwell teaches a display wherein the PC screen is remotely located from said programmer screen (Column 14 lines 52-54). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified display of Anderson with the teaching of Rockwell. Motivation to do so would have been to provide a way to analyze the data on a more suitable device made for processing.

As per claim 12, which is dependent on claim 11, the modified Anderson discloses a display wherein PC and programmer are connected in remote data communication (Column 14 lines 52-54).

Application/Control Number: 10/033,833  
Art Unit: 2174

Page 9

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bardy ("Bardy", US 6,221,011) in view of Anderson ("Anderson", US#6,078,871).

As per claim 13, Bardy teaches system to provide dynamic, real time display of data associated with at least one capacitor disposed in an IMD, the system comprising: a programming head wirelessly connected to the IMD (column 5 lines 45-65); a programming unit coupled to the programming head (Column 5 lines 45-65), a PC coupled to the programming unit, the PC wirelessly transfers the status data to another party to interpret the status data (Column 5 lines 45-65). However, Bardy fails to teach a graphical user interface to display the battery status sent by Bardy (Figure 7). Anderson teaches the programming unit includes a graphical user interface(GUI), the GUI dynamically displays status data associated with the at least one capacitor, the data being displayed in real time (Figure 3, Column 5 lines 19-20). Therefore it would have been obvious to an artisan at the time of the invention to combine Bardy's system with the current teaching of Anderson. Motivation to do so would have been to provide a more detailed way of reporting the battery charge status.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Application/Control Number: 10/033,833  
Art Unit: 2174

Page 10

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F. Pitaro whose telephone number is 571-272-

Art Unit: 2174

4071. The examiner can normally be reached on 7:00am - 4:30pm M-Th, and alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Pitaro  
Art Unit 2174  
Patent Examiner

RFP

*Kristine Kincaid*  
KRISTINE KINCAID  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100